Proposed Amendment to Net Metering Rule 5.100 ("Draft Rule")

Pursuant to Act 208, the legislature has directed the Public Service Board ("Board") to expand the net metering program. In order to comply with this legislative directive, we have conducted a workshop and reviewed an initial round of written comments and reply comments from the Department of Public Service ("DPS"), the utilities, and the renewable energy community. Based on these comments we developed a Draft Rule.

On October 18, 2006, we issued a memorandum with an attached copy of the Draft Rule and invited comments on the Draft Rule. Below is a summary of those comments and the Board's response to the comments.

Retention of the 1% cap on aggregate net metering capacity

Comments

The Draft Rule at Section 5.105(A)1, requires utilities to allow net metering to customers until the cumulative output capacity of the net metering systems equals 1.0 percent of the distribution company's peak demand during 1996 or the most recent calendar year, whichever is greater.

The Vermont Department of Agriculture ("DA") and Renewable Energy Vermont ("REV") argue that the cap should be raised. The DA maintains that the cap restricts the implementation of the relatively larger farm net metering systems located in the service areas of the smaller municipal utilities. In the alternative, the DA argues, a method to allow customers to exceed the cap is necessary to allow the growth of farm systems and should be included in the Draft Rule. The fourteen municipal electric departments ("Municipals") Central Vermont Public Service Corporation ("CVPS") and the Department of Public Service ("DPS") argue that because of the magnitude of unused capacity for net metering systems under the existing cap, the cap should be maintained.

Response

The 1% cap was originally established in 1997 pursuant to 30 V.S.A. 219a to limit financial impacts from net metered generation on utilities and other ratepayers. Since that time only 10% of the available resource under the existing program limits has been realized. Therefore, the existing cap can accommodate substantial expansion of the program. Futher, in cases where the net metering system exceeds the cap in a small utility's service area, the Draft Rule at 5.105(A)1 provides that the net metering customer and the utility may jointly petition the Board to exceed the capacity limits. Larger systems can also negotiate power purchase contracts with their respective utilities outside the net metering process and avoid the capacity constraints altogether. Therefore, the Board sees no need to increase the cap provision at this time.

Group Net Metering

Comments

The Draft Rule at 5.102(G) defines group net metering as "a group of physically contiguous customers located in a single electrical service provider territory that has elected to combine meters as a single billing entity in order to offset that billing against a net metered

generation facility located on property owned by a group member and physically contiguous to the group members."

The Municipals argue that group systems should not be permitted because they allow for the sale of electricity within the utility's exclusive franchise and will result in "increased uncompensated use of distribution facilities." CVPS and the Municipals argue that group systems create many implementation concerns and could impact customer service. CVPS also raises concerns regarding allocation of credits, confidentiality of billing information, and the size constraints governing these projects. CVPS suggests that the Draft Rule allow utilities the option of contracting with the group for purchase of excess generation.

Global Resource Options, Inc. ("GRO") argues that the requirement that group system members be physically contiguous is overly restrictive and should be removed. Renewable Energy Vermont ("REV") supports group systems, but also objects to the requirement that members be physically contiguous. REV argues that this requirement is overly burdensome and would prevent municipalities and neighbors in close proximity but with non-contiguous parcels from utilizing group systems. REV maintains that group systems should be permitted on a service-territory wide basis.

Response

The creation of group systems will allow municipalities and residential customers the opportunity to develop community based generation. We agree with GRO and REV that the requirement that municipal group system facilities be physically contiguous could potentially prevent municipalities with non-contiguous facilities from forming group systems. However, we also agree with the utilities that allowing group systems where meters are on different meter reading schedules could result in increased billing and administrative costs that may ultimately be borne by other ratepayers. In addition, we conclude that a proximity constraint will ensure that any environmental impacts created by the net metering systems employed should be borne by the group members. Therefore, we have retained the provision that residential group system members be physically contiguous. Municipal group systems would be exempt from this constraint in order to encourage community based generation encompassing potentially larger areas.

In addition, we wish to clarify that allocation of group system credits will be done in the same manner as farm group systems currently allocate credits. The serving utility shall treat the group system as a single aggregated billing entity for the purpose of application of Board Rules and billing. Any credits from excess generation shall be credited against the usage of the aggregated meters of the group on one bill. Concerns regarding allocations among group members, confidentiality among group members or other issues specific to the group, shall be the responsibility of the group members and not the serving utility. To date these types of issues have not been raised in connection with existing farm group net metering systems and, therefore, we see no reason why group systems in general will be more likely to cause these types of problems.

Generation Eligible for Net Metering

Comments

The Draft Rule defines a net metering system as employing a "renewable energy source that is being consumed at a harvest rate at or below its natural rate . . . and utilizes a photovoltaic array, wind turbine, fuel cell, biomass gasification or hydroelectric generating technology."

The DA and REV argue that the definition should be broadened to accommodate new forms of renewable energy not included in the definition.

CVPS does not object to the expansion of the definition to include hydroelectric facilities.

Response

We agree with REV and the DA that limiting the definition of eligible net metering systems would require the rule to be revised to accommodate new renewable technologies. Exclusion of new types of generation in the definition may also act as a disincentive to development of new forms of renewable energy not specifically included in the rule. Therefore, we have amended the rule to be more consistent with the broad definition of renewable energy pursuant to 30 V.S.A. § 8002(2).

12-Month Credit

Comments

The Draft Rule at 5.104(A)(4)c states that any "accumulated killowatt-hour credits shall be used within 12 months from the first credit month or shall revert to the electric company without compensation to the net metering system customer."

GRO, REV, CVPS and the Municipals argue that the intent of this section needs to be clarified.

Response

The intent of this subsection is to allow a net metering customer to carry forward any credit for excess generation for a full 12 months from the month in which the credit was generated. A credit generated in June, 2006, for example, could be used to offset consumption through June, 2007. This will allow customers that produce excess generation in the summer months to carry any credits into the winter months. Allowing this credit to be carried forward for up to twelve months will allow more net metering customers to "zero-out" their electricity usage. We have amended the subsection to further clarify this intent.

Industrial/Commercial Systems

Comments

The Draft Rule creates a new category of Industrial/Commercial net metering customers. These systems would be allowed to generate up to 150 kWs. Excess generation from these larger systems would be credited to the customer at the utilities' avoided cost rate instead of the full retail rate used for farm and residential customers. These systems would require two meters to measure the amount of power produced by the system and the amount of power consumed by the customer.

GRO and REV argue that because these systems would receive credits at the avoided cost

rate, they should not be considered true net metering systems which receive full retail rate for net excess generation. GRO and REV maintain that this categorization will unfairly penalize Industrial/Commercial customers and act as a disincentive to creation of these systems. CVPS argues that these systems raise safety and reliability concerns because of their relatively larger capacity and should be subject to the interconnection standards developed for larger systems under Board Rule 5.500.

Response

The purpose of creating this new category of net metering customers was to expand the program to allow for larger commercial systems. With the exception of farm systems, the existing Rule allows for only ten systems with capacity greater than 15 kWs up to 150 kWs. The new category would have allowed an unlimited number of industrial/commercial systems with up to 150 kWs in capacity. In order to lessen the potential financial impacts of an increase in the number of these relatively larger systems on utilities and ratepayers, excess generation would have been credited against consumption at the utilities' "avoided cost rate."

While we believe that the net metering program can be expanded to accommodate these larger systems, we also agree with GRO and REV that this type of system, because it would require the use of two meters, is not technically a net metered system and should, therefore, not be included under the net metering program. Customers with these types of systems that are interested in selling excess generation may enter into power purchase contracts with their respective utilities. Therefore, we have amended the Draft Rule to delete this category.

As an alternative method to expand the program to accommodate additional larger systems, we have amended the Draft Rule to include up to 15 projects per year with capacity up to 150kWs. In addition, we see no cause of concern for safety and reliability of the electric system due to interconnection of these larger systems in that the existing interconnection standards already apply to systems of this size.

Allowing Net Metered Generation as SPEED Resources

Comments

30 V.S.A. § 219a(e)(3)(C) requires that excess generation "reverting to the electric company . . . shall be considered SPEED resources under section 8005 of this title."

REV points out that the Draft Rule does not include such a provision.

Response

We agree with REV that this provision should be included in the Draft Rule and have amended the Draft Rule accordingly.

Developing a Renewable Energy Credit Sale System for Net Metered Generation

Comments

The Draft Rule does not provide a method for capture and sale of renewable energy credits ("RECs"). REV recommends that the Board devise a method for the sale of RECs to allow small generators to sell the renewable attributes into markets in Vermont and other states. CVPS and the DPS argue that because Vermont net metered generation serves Vermont load and

the gross output is not available for use by third parties and is not metered, it may not meet the standards in states where utilities are required to purchase RECs to meet their state's renewable portfolio standards. Therefore, they argue, there may be little ability to sell RECs.

Response

Currently only two states in the New England region, Connecticut and Massachusetts, have renewable portfolio programs that recognize RECs. Vermont does not have a renewable portfolio program and net metered generation may not meet the standards of other states' programs. Therefore, we agree with the DPS and CVPS that it makes little sense to develop a system that would be unlikely to generate any value to Vermont.

In addition, as discussed above, § 219a(e)(3)(C) requires that excess net metered generation be considered a SPEED resource. Allowing this generation to be considered a SPEED resource is beneficial to Vermont in that it satisfies the utilities' requirement for renewable energy and reduces the overall load due to the installation of net metered generation.

Purchase of Net Energy Generated

Comments

The Draft Rule provides that any net energy generated reverts to the utility after twelve months. REV argues that all customers should have the option to receive some type of financial compensation for net energy generated beyond the twelve-month period. REV suggests that the Rule be expanded to allow all customers to negotiate a contract for net energy generated.

Response

We agree that utilities should have the option of entering into a contract to purchase net metered generation from all systems and point out that the Draft Rule at 5.105(C) already allows for this type of negotiation for all systems. Therefore, no further revision is necessary.

Disconnect Switch

Comments

The interconnection standards for net metering systems require that the systems have a "utility accessible, lockable, load break rated, visible break disconnect switch with safe working clearances." REV argues that because all inverters that meet IEEE standards have automatic anti-islanding capabilities, the requirement for a disconnect switch is unnecessary. REV also requests clarification of the Rule regarding the specific location of the disconnect switch.

Response

We continue to believe that requiring a utility accessible disconnect switch is a necessary means of ensuring the safety of utility linemen working on the electrical system. Therefore, we conclude that this provision should remain in the Rule. However, we wish to clarify that the Rule does not specify the exact location that the disconnect switch must be located. As long as the disconnect switch is "accessible" by the utility, it is in compliance with the interconnection requirements. The Rule does not allow the utility to demand stricter location requirements and impose additional costs on the customer.

Raising Capacity Limits of Systems

Comments

The existing Rule allows for non-farm net metering systems of up to 15 kWs capacity. The Rule also allows farm systems up to 150 kWs capacity. In addition, the Rule also allows up to 10 per year between 15 kWs and 150 kWs in capacity. REV argues that the limits on system capacity be expanded to at least 250 kWs for all customer classes. REV maintains that allowing larger systems may be more financially attractive to some customers. CVPS and the DPS argue that the existing caps should not be increased. CVPS maintains that allowing larger systems will increase the opportunity for cost-shifting from net metering customers to the utility and its other ratepayers.

Response

As noted above the existing Rule allows for up to 10 systems per year between 15 kws and 150 kWs in capacity. Based on our experience administering the program, the existing capacity limits are adequate to address the demand for larger net metering systems. Since the program has been in place, the Board has approved only three applications for non-farm systems over 15 kWs out of the approximately 300 applications approved. Of these three systems none is greater than 68 kWs in capacity. In addition, of the six farm systems approved only three are greater than 15 kWs in capacity and none are greater than 65 kWs in capacity. Therefore, there appears to be no reason to expand the capacity limits based on present demand for larger systems. However, because the Draft Rule proposes to expand the net metering program to include individual and municipal group net metering systems that may utilize larger systems, we have increased the number of projects between 15 kWs and 150 kWs per year allowed from ten to fifteen. This will allow for a potential increase of applications for larger systems in response to group net metering. At the same time, limiting these systems to fifteen per year should ensure that the number of smaller systems and farm systems permitted is not unduly constrained under the utilities' maximum capacity limits. In addition, as discussed above, larger systems are free to negotiate power purchase contracts directly with the utilities outside the constraints of the net metering system.